

AMENDMENTS TO THE CLAIMS

This listing replaces all prior versions and listings of claims in the application.

Listing of Claims

1-90. (Cancelled)

91. (New) A method of treating urinary incontinence comprising increasing resistance of passage of urine through a urethra comprising administering a prosthetic device into the urethra, said prosthetic device comprising a hydrogel comprising about 0.5% to 25% by weight of a polymer, based on the total weight of the hydrogel, said polymer prepared by a method comprising combining acrylamide and methylene bis-acrylamide; wherein said hydrogel includes less than 50 ppm monomeric units, has a complex viscosity of about 2 to 50 Pas and has an elasticity modulus of about 1 to 200 Pa.

92. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the polymer is prepared by combining acrylamide and methylene bis-acrylamide in a molar ratio of 150:1 to 1000:1.

93. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel comprises less than 15% by weight of the polymer, based on the total weight of the hydrogel.

94. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel comprises at least 1% by weight of the polymer, based on the total weight of the hydrogel.

95. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel has a complex viscosity of about 2 to 40 Pas.

96. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel comprises at least 75% by weight pyrogen-free water or saline solution.

97. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the administering comprises injecting the hydrogel.

98. (New) The method according to claim 97, wherein the injecting of the hydrogel comprises injections which include injections at positions 10, 2, and 6 o'clock of the cross-sectional axis of the urethra.
99. (New) The method according to claim 91, 111, 115, 116 or 117, further comprising the inclusion of cells.
100. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel comprises less than 10% by weight of the polymer, based on the total weight of the hydrogel.
101. (New) The method according to claim 100, wherein the hydrogel comprises less than 7.5% by weight of the polymer, based on the total weight of the hydrogel.
102. (New) The method according to claim 101, wherein the hydrogel comprises less than 5% by weight of the polymer, based on the total weight of the hydrogel.
103. (New) The method according to claim 102 wherein the hydrogel comprises less than 3.5% by weight of the polymer, based on the total weight of the hydrogel.
104. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel comprises at least 1.6% by weight of the polymer, based on the total weight of the hydrogel.
105. (New) The method according to claim 95, wherein the hydrogel has a complex viscosity of about 2 to 30 Pas.
106. (New) The method according to claim 105, wherein the hydrogel has a complex viscosity of about 2 to 20 Pas.
107. (New) The method according to claim 99, wherein the cells comprise stem cells.
108. (New) The method according to claim 99, wherein the cells allow for cellular engraftment to the surrounding tissue in the urethra.
109. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the polymer is substantially comprised of cross-linked polyacrylamide.

110. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the polymer consists essentially of a polyacrylamide crosslinked with the cross-linking agent methylene bis-acrylamide.

111. (New) A method of treating urinary incontinence comprising providing adequate resistance in a urethra by bulking the urethra comprising administering a prosthetic device into the urethra, said prosthetic device comprising a hydrogel comprising about 0.5% to 25% by weight of a polymer, based on the total weight of the hydrogel, said polymer prepared by a method comprising combining acrylamide and methylene bis-acrylamide; wherein said hydrogel includes less than 50 ppm monomeric units, has a complex viscosity of about 2 to 50 Pas and has an elasticity modulus of about 1 to 200 Pa.

112. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel has an elasticity modulus of about 5 to 150 Pa.

113. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel has an elasticity modulus of about 10 to 100 Pa.

114. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the elasticity modulus and the complex viscosity are related by a factor of 5.8 to 6.4.

115. (New) A method of treating urinary incontinence comprising injecting a urethral bulking agent into the urethra wherein said bulking agent comprises a hydrogel comprising i) pyrogen-free water or saline solution and ii) about 0.5% to 25% by weight of a polymer, based on the total weight of the hydrogel, said polymer prepared by a method comprising combining acrylamide and methylene bis-acrylamide; wherein said hydrogel includes less than 50 ppm monomeric units, has a complex viscosity of about 2 to 50 Pas and has an elasticity modulus of about 1 to 200 Pa.

116. (New) A method of treating urinary incontinence comprising injecting a hydrogel into a urethra, said hydrogel comprising about 0.5% to 25% by weight of a polymer, based on the total weight of the hydrogel, said polymer prepared by a method comprising combining acrylamide and methylene bis-acrylamide; wherein said hydrogel includes less than 50 ppm

monomeric units, has a complex viscosity of about 2 to 50 Pas and has an elasticity modulus of about 1 to 200 Pa.

117. (New) A method of treating urinary incontinence by bulking a urethra comprising administering a prosthetic device into the urethra, said prosthetic device comprising a hydrogel comprising about 0.5% to 25% by weight of a polymer, based on the total weight of the hydrogel, said polymer prepared by a method comprising combining acrylamide and methylene bis-acrylamide; wherein said hydrogel includes less than 50 ppm monomeric units, has a complex viscosity of about 2 to 50 Pas and has an elasticity modulus of about 1 to 200 Pa.

118. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel comprises at least 85% by weight pyrogen-free water or saline solution.

119. (New) The method according to claim 118, wherein the hydrogel comprises at least 90% by weight pyrogen-free water or saline solution.

120. (New) The method according to claim 119, wherein the hydrogel comprises at least 95% by weight pyrogen-free water or saline solution.

121. (New) The method according to claim 115, wherein said bulking agent comprises a hydrogel comprising i) at least 75% pyrogen-free water or saline solution and ii) about 0.5% to 25% by weight of polyacrylamide, based on the total weight of the hydrogel, said polyacrylamide prepared by combining acrylamide and methylene bis-acrylamide; wherein said hydrogel includes less than 50 ppm monomeric units, has a complex viscosity of about 2 to 50 Pas and has an elasticity modulus of about 1 to 200 Pa.

122. (New) The method according to claim 91, 111, 115, 116, 117, or 121, wherein the hydrogel is homogenized.

123. (New) The method according to claim 109, wherein said polymer is cross-linked polyacrylamide.

124. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel has a complex viscosity of about 3 to 15 Pas and wherein the elasticity modulus and the complex viscosity are related by a factor of 5.8 to 6.4.

125. (New) The method according to claim 91, 111, 115, 116 or 117, wherein the hydrogel includes less than 10 ppm monomeric units.

126. (New) The method according to claim 91, 111, 115, 116, 117 or 121, wherein the hydrogel comprises at least 1.5% by weight polyacrylamide and less than 10% by weight polyacrylamide, and at least 90% by weight pyrogen-free water or saline solution, based on the total weight of the hydrogel, said polyacrylamide prepared by combining acrylamide and methylene bis-acrylamide; wherein said hydrogel includes less than 10 ppm monomeric units, has a complex viscosity of about 2 to 20 Pas and has an elasticity modulus of about 1 to 100 Pa.

127. (New) The method according to claim 91, 111, 115, 116, 117 or 121, wherein the incontinence is chosen from stress, reflex and urge incontinence.

128. (New) The method according to claim 91, 111, or 117, wherein the prosthetic device is administered into the submucosa of the urethra.